the depth of which is two ninths of the length of the head, whilst it is rather more than one third in those two species.

The length of the head is one tenth of the distance between the gill-opening and vent; tail almost as long as the body. Cleft of the mouth of moderate width, extending to some distance behind the eye, which is small, and somewhat nearer to the corner of the mouth than to the end of the snout. Snout pointed, more than twice as long as the eye, projecting beyond the mouth. Anterior nostril with a small tube; posterior on the inner side of the lip, below the front margin of the eye. Teeth pointed, uniserial. Gill-openings lateral. Pectoral fin reduced to a minute filament. The dorsal and anal are about half as high as the body, the former commencing midway between the gill-opening and the eye. Coloration uniform.

Misol Island. Length 24 inches, the tail being 11½ inches long; depth of the body 3 lines.

*Ophichthys misolensis.*

The length of the head is one seventh of the distance between the gill-opening and vent; tail as long as the body. The depth of the body is one third of the length of the head. Eye small, above the middle of the cleft of the mouth, which is of moderate width. Snout pointed, twice as long as the eye, projecting beyond the mouth. Anterior nostril with a very short tube; posterior on the inner side of the lip, below the front margin of the eye. Teeth equally small, pointed, uniserial. Gill-openings somewhat oblique, lateral. Pectoral fin none. Dorsal and anal fins low, the former commencing at a very short distance behind the gill-opening, the latter immediately behind the vent. Coloration uniform.

Misol Island. Length 11 inches.

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## LXI.—*On* Psammoperca *and* Cnidon. By Dr. A. Günther.

These two genera are identical; and the name *Psammoperca* given by Richardson in 1846 has the priority, the name *Cnidon* dating from the year 1849 (Müll. & Trosch. Hor. Ichthyol. Heft 3). The amended diagnosis of the genus will stand as follows:—

Seven branchiostegals. Pseudobranchiæ none. All the teeth villiform, in bands, without canine teeth; tongue with a small, ovate, rough patch. Operculum with a small spine; præoperculum with a strong spine at the angle, with the posterior edge serrated, and with the lower limb smooth and covered by membrane. Two dorsal fins, slightly continuous, the first with seven or eight strong spines, another being

attached to the soft dorsal; three anal spines. Caudal rounded. Pectoral short, rounded. Scales rather large, finely ctenoid.

It is more difficult to come to a final decision as regards the specific affinity of *Psammoperca waigiensis* and *Cnidon chinensis*. The British Museum possesses now six examples:—

1. The typical example, stuffed, from Australia (9 inches).
2. A stuffed example from Victoria (7 inches).
3. An example in spirits from New South Wales (9 inches).
4. A stuffed example from Torres Straits (12 inches).
5. An example in spirits from Manila (10 inches); obtained by Dr. A. B. Meyer, and undoubtedly identical with *Cnidon chinensis*.
6. A dry skin, said to be from China, obtained from a dealer (10 inches long).

In all these specimens the formula of the fins is the same: the first dorsal has only seven spines, not eight*, the eighth spine belonging to the second dorsal fin. In other respects nearly every one of the specimens shows certain peculiarities, so that no two agree perfectly with one another, not even those from South Australia; but I think these differences are so slight as not to allow of specific distinction. Thus the number of scales in the lateral line varies from forty-seven to fifty-five; the vertical fins are sometimes quite naked, sometimes more or less thinly covered with minute scales; the humerus has sometimes two short points behind, sometimes one of the points is slightly denticulated, sometimes the lower is absent altogether. There is only one point by which the Philippine specimen is somewhat more conspicuously distinguished; and that is the distinctly concave profile of the snout; but also in this respect it is approached by that of our Australian example which is preserved in spirits, although the concavity is so slight that it has been entirely effaced in the stuffed specimens.

Under these circumstances I am inclined to regard these fishes as specifically identical.

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## LXII.—*On the Structure of the Echinoidea.* By S. Lovén.

[Concluded from p. 385.]

The same arrangement that is expressed by the formula for the two series of the ambulacral peristomial plates, makes itself apparent also in the appearance of the sphæridia. In the Spatangidæ (for example, *Brissopsis lyrifera*) they first show themselves in the one-pored peristomial plate in each ambulacrum, quite close to the suture, and usually incline over towards the

* What I have formerly (in dried specimens) taken for the spine of the second dorsal fin is, in fact, only the hardened first simple ray.